Rs in Crores

| S. No. | Name of Work | Total Cost | Exp. upto 31.3.98 | Outlay 98-99 |
|---|---|---|---|---|
| 1. | Thane-Turbe-Nerui-Vashi part of Corridor No. 2 in New Mumbai | Rly. 131.47 | 40.56 | 20.00 |
| | | CIDCO 271.92 | 22.87 | 68.22 |
| | | Total 403.39 | 63.43 | 88.22 |
| 2. | Belapur-Panvel Double Line | Rly. 92.34 | 42.52 | 26.34 |
| | | CIDCO 187.49 | 36.37 | 26.17 |
| | | Total 279.83 | 78.89 | 52.51 |
| 3. | Seawood-Urban Electrified Line | Rly. 163.49 | 0.21 | 18.00 |
| | | CIDCO 331.95 | 4.19 | 16.13 |
| | | Total 495.44 | 4.40 | 34.13 |
| 4. | Mumbai Division-Conversion of 1500 v DC to 25 Kv AC traction system | 547.57 | 0.13 | 11.50 |
| 5. | Kurla-Thane (Phase-I) Additional pair of lines between Kurla and Bhandup. | 49.84 | 14.26 | 25.00 |
| 6. | Kurla-Thane (Phase-II) Additional pair of lines between Bhandup and Thane. | 46.69 | 0.00 | 5.00 |
| 7. | Conversion of 1500 v DC to 25 Kv AC from Churchgate to Virar | 184.94 | 0.24 | 11.14 |
| 8. | 5th line between Santacruz and Borivali | 64.17 | 23.40 | 20.00 |
| 9. | Quadrupling of Tracks between Borivali and Virar. | 401.66 | 0.04 | 35.00 |
| 10. | Automatic Block signalling between Virar and Dhanu Road | 27.19 | 0.01 | 10.00 |

For safety and security of suburban commuters, coaches are maintained regularly. Maintenance and renewal/replacement of track is a continuous process.

**AIMS and objects of CSIR**

774. SHRI E. BALANANDAN:
SHRI S. RAMACHANDRAN PILLAI:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) what were the aims and objects of CSIR when it was first established;

(b) whether the same are being fulfilled;

(c) if so, the details thereof; and

(d) if not, the reasons therefor?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT AND SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI): (a) The Council of Scientific and Industrial Research (CSIR) was formed in 1942 as an autonomous society with a wide charter off functions. These included promotion, guidance and co-ordination of scientific and industrial research, collection and dissemination of information on research and industry, founding of laboratories to further scientific and industrial research and exploitation of the research results for development of industry. CSIR was also charged with other tasks such as rendering assistance to other institutions, conducting research, awarding fellowships and publishing scientific journals.

(b) and (c) Over the years CSIR has performed its assigned role in consonance with national needs and priorities. CSIR today is a well knit, co-ordinated, action oriented network of 40 research laboratories spread throughout the country with the mission of providing scientific and industrial R&D that maximises the economic, environmentatl and societal benefits for the people of India. CSIR carries out R&D of value not only to industry but also to other sectors of economy such as agriculture, aerospace health, power utilities, mining, defence etc. It carries out R&D in areas of

national priority with a long term impact, size or complexity that are vital to the national security and the future well being and economic growth of the country. The CSIR's scientific and technological annual average output. Comprises publications of nearly 2000 research/technical/learned/papers, development of 100 new technologies and signing of 200 agreements for new industrial production in diverse areas.

(d) Does not arise.

**Loss due to corrosion of scarce materials**

775. SHRI GOVINDRAO ADIK: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that the country lose nearly Rs. 13,000 crore annually due to corrosion of metals, alloys and other materials and their replacement;

(b) if so, the details of steps taken/proposed for application of technologies developed in the country to check corrosion of scarce materials;

(c) the details of action plan for adoption of technologies developed indigeniously to deal with corrosion problem; and

(d) the present status of action plan?

THE MINISTER FOR HUMAN RESOURCE DEVELOPMENT AND SCIENCE AND TECHNOLOGY (DR. MURLI MANOHAR JOSHI): (a) Generally, it is estimated that a country's loss due to corrosion is of the order of 2 to 5% off its GNP depending on its level of industrial development and its geographical location. Thus, based on India's GNP in 1996-97, the corrosion loss even at 2% of GNP will be around Rs. 25,000 crore.

(b) to (d) Several R&D institutions such as CSIR, DRDO, ONGC, Atomic Energy are working towards corrosion evaluation and mitigation. However, more specifically the Central Electrochemical Research Institute (CECRI), Karaikudi of CSIR as a very active R&D programme on Corrosion. It has set up an atmospheric corrosion testing station at Mandapam in Tamil Nadu, which, being a wind swept place with high levels of humidity, temperature and salinity, is an ideal place for testing the levels of corrosion of metals and alloys and performance of protective coatings. Besides the Institute has over the years developed over 75 potective coatings and processes for corrosion prevention and licensed these to over 150 parties. The Institute is also helping the industries with corrosion audit studies and preventive measures.

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## PAPERS LAID ON THE TABLE

*12.00 Noon*

Report and Accounts (1997-98) of the National Coorperative consumers Federation of India Ltd. New Delhi and related Papers.

THE MINISTER OF CHEMICALS AND FERTILIZERS AND MINISTER OF FOOD AND CONSUMER AFFAIRS (SHRI SURJIT SINGH BARNALA) : Sir, I lay on the Table a copy each (in English and Hindi) of the following papers:—

(i) Thirty-third Annual Report and Accounts of the National Cooperative Consumers' Federation of India Limited, New Delhi, for the year 1997-98, together with the Auditors' Report on the Accounts.

(ii) Review by Government on the working of the above Federation. [Placed in Library. See No. Lt. 1704/98]

I. Notifications of the Ministry of Railways.

II. Report and Accounts (1996—98) of the Indian Railway welfare Organisation, New Delhi and related Papers.

THE MINISTER OF RAILWAYS (SHRI NITISH KUMAR): Sir, I lay on the Table—

I. (i) A copy (in English and Hindi) of the Ministry of Railways Notification G.S.R. 410 (E), dated the 24th July, 1998, publishing the Railway Passengers (Cancellation of ticket and refund of fare) Rules, 1998, under section 199 of the Railways Act, 1989 [Placed in Library. See No. Lt. 1579/98]

(ii) A copy (in English and Hindi) of the Ministry of Railways Notification G.S.R. 563 (E), dated the 8th September, 1998 publishing the